

In the Claims

1. (currently amended) A method of diagnosing, in a network comprising two devices connectable by a link, ~~the type of failure~~ a failure of the connection between the devices, said method comprising:

connecting the two devices ~~together~~ together, at least one of the devices including a plurality of registers, ~~each register being adapted to store data about one or more types of said failure,~~ the plurality of registers including at least one each of a first register configured to receive error signals associated with a physical link failure and a second register configured to receive error signals associated with an auto-negotiation protocol failure;

running an auto-negotiation sequence,

detecting ~~said failure~~ a failure and passing ~~signals relating to that an~~ an error signal associated with the detected failure to the relevant ~~register(s),~~ first or second register;

interrogating ~~the or~~ each register to determine whether the detected failure is based on a physical link failure or an auto-negotiation protocol failure, and

~~determining the type of said failure from a plurality of types of failure, and wherein the step of determining the type of said failure includes the step of determining the data in the relevant register(s) and from said data, indicating the type of said failure and/or a proposed course of action.~~

2. (cancelled)

3. (currently amended) The method of claim 1, further comprising:
displaying a message ~~indicating the type of said~~ identifying the failure
and/or a proposed course of action on a visual display unit.
4. (currently amended) A method as claimed in claim 1 in which said ~~failure~~
~~comprises~~ plurality of registers includes a first register associated with a loss
of light.
5. (currently amended) A method as claimed in claim 1 in which said ~~failure~~
~~comprises~~ plurality of registers includes a first register associated with a
bit/word alignment failure.
6. (currently amended) A method as claimed in claim 1 in which said ~~failure~~
~~comprises~~ plurality of registers includes a second register associated with a
loss of synchronization during auto-negotiation.
7. (currently amended) A method as claimed in claim 1 in which said ~~failure~~
~~comprises~~ plurality of registers includes a second register associated with an
auto-negotiation protocol hang during base page exchange.
8. (currently amended) A method as claimed in claim 1 in which said ~~failure~~
~~comprises~~ plurality of registers includes a second register associated with an
auto-negotiation protocol hang during next page exchange.

9. (currently amended) A method as claimed in claim 1 in which said ~~failure comprises~~ plurality of registers includes a second register associated with an auto-negotiation protocol (repeated) restart due to initiation of a "break link".

10. (currently amended) A method as claimed in claim 1 in which the ~~steps of interrogation and of determining are~~ step of interrogating is controlled by a program on a device in the network.

11. (currently amended) A method as claimed in claim 1 in which the ~~steps of interrogation and of determining are~~ step of interrogating is controlled by a program on one of said devices.

12. - 24. (cancelled)

25. (New) The method of claim 1, wherein the plurality of registers includes a plurality of first registers, each configured to receive error signals associated with a different physical link failure.

26. (New) The method of claim 1, wherein the plurality of registers includes a plurality of second registers, each configured to receive error signals associated with a different auto-negotiation protocol failure.